



US008480734B2

(12) **United States Patent**
Kellan et al.

(10) **Patent No.:** **US 8,480,734 B2**
(45) **Date of Patent:** **Jul. 9, 2013**

(54) **INTRAOCULAR LENS WITH
ACCOMMODATION**

(75) Inventors: **Robert E. Kellan**, North Andover, MA
(US); **Paul Koch**, East Greenwich, RI
(US)

(73) Assignee: **Anew Optics, Inc.**, Bristol, TN (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **11/965,263**

(22) Filed: **Dec. 27, 2007**

(65) **Prior Publication Data**

US 2009/0171458 A1 Jul. 2, 2009

(51) **Int. Cl.**
A61F 2/16 (2006.01)

(52) **U.S. Cl.**
USPC **623/6.51**; 623/6.37; 623/6.52; 623/6.53;
623/6.54

(58) **Field of Classification Search**
USPC 623/6.46, 6.37, 6.51, 6.52, 6.45,
623/6.43, 4.1
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,673,616 A	7/1972	Fedorov et al.
3,866,249 A	2/1975	Flom
3,906,551 A	9/1975	Otter
3,913,148 A	10/1975	Potthast
3,975,779 A	8/1976	Richards et al.
4,014,049 A	3/1977	Richards et al.
4,053,953 A	10/1977	Flom et al.
4,073,014 A	2/1978	Poler
4,087,866 A	5/1978	Choyce et al.

4,092,743 A	6/1978	Kelman
4,102,567 A	7/1978	Cuffe et al.
4,136,406 A	1/1979	Norris
4,141,973 A	2/1979	Balazs
4,159,546 A	7/1979	Shearing
4,173,281 A	11/1979	Trought
4,174,543 A	11/1979	Kelman
4,190,049 A	2/1980	Hager et al.
4,198,980 A	4/1980	Clark
4,215,440 A	8/1980	Worst

(Continued)

FOREIGN PATENT DOCUMENTS

CN	1713862	12/2005
DE	2556665	6/1977

(Continued)

OTHER PUBLICATIONS

Zaldivar et al.; "The Current Status of Phakic Intraocular Lenses;"
International Ophthalmology Clinics; vol. 36, No. 4; 1996; pp. 107-
111.

(Continued)

Primary Examiner — David H Willse
Assistant Examiner — Tiffany Shipmon

(74) *Attorney, Agent, or Firm* — Remenick PLLC

(57) **ABSTRACT**

An accommodating intraocular implant apparatus is disclosed for implantation in the human eye. The apparatus includes an optic portion having a periphery and an optic axis, said optic portion lying substantially within an optic plane transverse to said optic axis; at least one flexible haptic extending from a point on or near the periphery of the optic portion; at least one flexible haptic having a fixation anchor portion distal to the periphery of the optic portion; and at least one flexible haptic having a centering anchor portion. The fixation anchor portion and the centering anchor portion are adapted to couple to a portion of the eye.

19 Claims, 30 Drawing Sheets

